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SEQUENCE LISTING

- (1) GENERAL INFORMATION:
 - (i) APPLICANT: MCBRIDE, William J. GRIFFITHS, Gary L.
 - (ii) TITLE OF INVENTION: RADIOMETAL-BINDING PEPTIDE ANALOGUES
 - (111) NUMBER OF SEQUENCES: 34
 - (iv) CORRESPONDENCE ADDRESS:

 - (A) ADDRESSEE: FOLEY & LARDNER (B) STREET: 3000 K Street, N.W.
 - (C) CITY: Washington
 - (D) STATE: D.C.

 - (E) COUNTRY: U.S.A. (F) ZIP: 20007-5109
 - (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk

 - (8) COMFUTER: IBM PC compatible
 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 (D) SOFTWARE: Fatentin Release #1.0, Version #1.30
 - (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 08/893,749
 - (B) FILING DATE: 11-JUL-1997
 - (C) CLASSIFICATION:
 - (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 60/021,662
 - (B) FILING DATE: 12-JUL-1996
 - (viii) ATTORNEY/AGENT INFORMATION:

 - (A) NAME: Saxe, Bern D. (B) REGISTRATION NUMBER: 28,665
 - (C) REFERENCE/DOCKET NUMBER: 018733/0804
 - (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (202) 672-5300
 - (B) TELEFAX: (202) 672-5399
- (2) INFORMATION FOR SEQ ID NO:1:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 7 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /product= "Nle"

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(ix) FEATURE:

(A) NAME/KEY: Modified-site

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- (B) LOCATION: 4
- (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Xaa Asp His Xaa Arg Trp Lys

- (2) INFORMATION FOR SEQ ID NO:2:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 28 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (x1) SEQUENCE DESCRIPTION: SEQ ID NO:2:

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn

- (2) INFORMATION FOR SEQ ID NO:3:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 28 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (x1) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Lys Pro Arg Arg Pro Tyr Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn

- (2) INFORMATION FOR SEQ ID NO:4:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 24 amino acids
 - (B) TYPE: amino acid

 - (C) STRANDEDNESS: (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

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(x1) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln Met Ala Val Lys

Lys Tyr Leu Asn Ser Ile Leu Asn 20

- (2) INFORMATION FOR SEQ ID NO:5:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 19 amino acids
 - (B) TYPE: amino acid (C) STRANDEDNESS:

 - (D) TOPOLOGY: linear
 - (11) MOLECULE TYPE: peptide
 - (x1) SEQUENCE DESCRIPTION: SEQ ID NO:5;

Tyr Thr Arg Leu Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser

Ile Leu Asn

- (2) INFORMATION FOR SEQ ID NO:6:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "Xaa is pyroglutamic acid"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

Xaa His Trp Ser Tyr Lys Leu Arg Pro Gly

- (2) INFORMATION FOR SEQ ID NO: 7:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 1

(D) OTHER INFORMATION: /note= "Xaa is pyroglutamic acid"

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(x1) SEQUENCE DESCRIPTION: SEQ ID NO:7:

Xaa His Tyr Ser Leu Lys Trp Lys Pro Gly

- (2) INFORMATION FOR SEQ ID NO:8:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid

 - (C) STRANDEDNESS: (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "D isomer of 2-naphthylalanine"
 - (1x) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 2
 (D) OTHER INFORMATION: /note= "D isomer of 4-chlorophenylalanine"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 3
 - (D) OTHER INFORMATION: /note= "Xaa is D-Trp"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6
 - (D) OTHER INFORMATION: /note= "Xaa is D-Lys"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 10
 - (D) OTHER INFORMATION: /note= "Xaa is D-Ala"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Xaa Xaa Xaa Ser Arg Xaa Leu Arg Pro Xaa

- (2) INFORMATION FOR SEQ ID NO:9:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid

 - (C) STRANDEDNESS: (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

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- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 4
 - (D) OTHER INFORMATION: /product= "Nle"
- (1x) FEATURE:
 - (A) NAME/KEY: Modified-site (B) LOCATION: 7

 - (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
- (x1) SEQUENCE DESCRIPTION: SEQ ID NO:9:

Ser Tyr Ser Xaa Asp His Xaa Arg Trp Lys 1 10

- (2) INFORMATION FOR SEQ ID NO:10;
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 31 amino acids
 - (B) TYPE: amino acid (C) STRANDEDNESS:

 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 17
 - (D) OTHER INFORMATION: /product= "Nle"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

His Ser Asp Ala Val Phe Thr Glu Asn Tyr Thr Lys Leu Arg Lys Gln

Xaa Ala Ala Lys Lys Tyr Leu Asn Asp Leu Lys Lys Gly Gly Thr

- (2) INFORMATION FOR SEQ ID NO:11:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11 amino acids
 - (B) TYPE: amino acid

 - (C) STRANDEDNESS: (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "Xaa is pyroglutamic acid"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

Xaa His Tyr Ser Tyr Leu Lys Trp Lys Pro Gly

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- (2) INFORMATION FOR SEQ ID NO:12:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids

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- (B) TYPE; amino acid (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
- (D) OTHER INFORMATION: /note= "D isomer of
- 2-naphthylalanine"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 2
- (D) OTHER INFORMATION: /note= "D isomer of 4-chlorophenylalanine"
 - (1x) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 3
 - (D) OTHER INFORMATION: /note= "Xaa is D-Trp"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6
 - (D) OTHER INFORMATION: /note= "Xaa is D-Lys"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

Xaa Xaa Xaa Ser Arg Xaa Trp Lys Pro Gly

- (2) INFORMATION FOR SEQ ID NO:13:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid (C) STRANDEDNESS:

 - (D) TOPOLOGY: linear
 - (11) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "Xaa is pyroglutamic acid"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6
 - (D) OTHER INFORMATION: /note= "Xaa is D-Lys"

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:7

Xaa His Trp Ser Tyr Xaa Leu Arg Pro Gly

- (2) INFORMATION FOR SEQ ID NO:14:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid

 - (C) STRANDEDNESS:
 (D) TOPOLOGY: linear
 - (11) MOLECULE TYPE: peptide
 - (1x) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 2
 - (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 5
 - (D) OTHER INFORMATION: /note= "Xaa is D-Trp"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Lys Xaa Cys Phe Xaa Lys Thr Cys Thr

- (2) INFORMATION FOR SEQ ID NO:15:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE; amino acid

 - (C) STRANDEDNESS: (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 3
 - (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6
 - (D) OTHER INFORMATION: /note= "Xaa is D-Trp"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

Lys Asp Xaa Cys Phe Xaa Lys Thr Cys Thr

- (2) INFORMATION FOR SEQ ID NO:16:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid

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- (C) STRANDEDNESS; (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:

 - (A) NAME/KEY: Modified-site
 (B) LOCATION: 2
 (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 5
 - (D) OTHER INFORMATION: /note= "Xaa is D-Trp"
- (x1) SEQUENCE DESCRIPTION: SEQ ID NO:16:

Asp Xaa Cys Phe Xaa Lys Thr Cys Thr

- (2) INFORMATION FOR SEQ ID NO:17:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (11) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 4
 - (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 7
 - (D) OTHER INFORMATION: /note= "Xaa is D-Trp"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

Lys Lys Lys Xaa Cys Phe Xaa Lys Thr Cys Thr

- (2) INFORMATION FOR SEQ ID NO:18:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11 amino acids
 - (B) TYPE: amino acid

 - (C) STRANDEDNESS: (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 4
 - (D) OTHER INFORMATION: /note= "Xaa is D-Phe"

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(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 7
- (D) OTHER INFORMATION: /note= "Xaa is D-Trp"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

Lys Lys Asp Xaa Cys Phe Xaa Lys Thr Cys Thr

- (2) INFORMATION FOR SEQ ID NO:19:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 4
 - (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site (B) LOCATION: 7

 - (D) OTHER INFORMATION: /note= "Xaa is D-Trp"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

Lys Asp Ser Xaa Cys Phe Xaa Lys Thr Cys Thr

- (2) INFORMATION FOR SEQ ID NO:20:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids (B) TYPE: amino acid

 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 3
 - (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site (B) LOCATION: 6

 - (D) OTHER INFORMATION: /note= "Xaa is D-Trp"

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

Lys Asp Xaa Cys Phe Xaa Lys Thr Cys Asp

- (2) INFORMATION FOR SEQ ID NO:21:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (1x) FEATURE:
 - (A) NAME/KEY: Modified-site (B) LOCATION: 1

 - (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 4
 - (D) OTHER INFORMATION: /note= "Xaa is D-Trp"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

Xaa Cys Phe Xaa Lys Thr Cys Thr Lys

- (2) INFORMATION FOR SEQ ID NO:22:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 31 amino acids
 - (B) TYPE: amino acid

 - (C) STRANDEDNESS: (D) TOPOLOGY: linear
 - (11) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

Cys Gly Cys His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu

Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn

- (2) INFORMATION FOR SEQ ID NO:23:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 27 amino acids
 - (B) TYPE: amino acid (C) STRANDEDNESS:

 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

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(x1) SEQUENCE DESCRIPTION: SEQ ID NO:23:

Cys Gly Cys Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln Met

Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn

- (2) INFORMATION FOR SEQ ID NO:24:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (1x) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "Xaa is pyroglutamic acid"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

Xaa His Trp Ser Tyr Gly Leu Arg Pro Gly

- (2) INFORMATION FOR SEQ ID NO:25:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "D isomer of 2-naphthylalanine"
 - - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site(B) LOCATION: 2
 - (D) OTHER INFORMATION: /note= "D isomer of
 - 4-chlorophenylalanine"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 3
 - (D) OTHER INFORMATION: /note= "Xaa is D-Trp"
 - (1x) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6
 - (D) OTHER INFORMATION: /note= "Xaa is D-Arg"

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(x1) SEQUENCE DESCRIPTION: SEQ ID NO:25:

Xaa Xaa Xaa Asp Glu Xaa Leu Lys Pro 1 5

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- (2) INFORMATION FOR SEQ ID NO:26:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "Xaa is pyroglutamic acid"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6
 - (D) OTHER INFORMATION: /note= "Xaa is D-Trp"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 26:

Xaa His Trp Ser Lys Xaa Leu Arg Pro Gly 1 5 10

- (2) INFORMATION FOR SEQ ID NO:27;
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "Xaa is pyroglutamic acid"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6
 - (D) OTHER INFORMATION: /note= "Xaa is D-Lys"
 - (x1) SEQUENCE DESCRIPTION: SEQ ID NO:27:

Xaa His Tyr Ser Leu Xaa Leu Arg Pro Gly 1 5 -62-

- (2) INFORMATION FOR SEQ ID NO: 28:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 13 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

Ser Tyr Ser Met Glu His Phe Arg Trp Gly Lys Pro Val

- (2) INFORMATION FOR SEQ ID NO:29:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (11) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 4
 - (D) OTHER INFORMATION: /product= "Nle"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 7
 - (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
 - (1x) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 8
 - (D) OTHER INFORMATION: /note= "Xaa is a nitrated arginine residue"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

Ser Tyr Ser Xaa Asp His Xaa Xaa Trp Lys

- (2) INFORMATION FOR SEQ ID NO:30:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid

 - (C) STRANDEDNESS: (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site

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(B) LOCATION: 3

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- (D) OTHER INFORMATION: /product= "Nle"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6
 - (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

Gly Cys Xaa Asp His Xaa Arg Trp Lys 5

- (2) INFORMATION FOR SEQ ID NO:31:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid

 - (C) STRANDEDNESS: (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 4
 - (D) OTHER INFORMATION: /product= "Nle"
 - (1x) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 7
 - (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

Cys Gly Cys Xaa Asp His Xaa Arg Trp Lys

- (2) INFORMATION FOR SEQ ID NO:32;
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 28 amino acids
 - (B) TYPE: amino acid (C) STRANDEDNESS:

 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 17
 - (D) OTHER INFORMATION: /product= "Nle"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 32;

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Lys Leu Arg Lys Gln

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Xaa Ala Val Lys Lys Tyr Leu Asn Ser Val Leu Thr 20

- (2) INFORMATION FOR SEQ ID NO:33:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids .

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- (B) TYPE: amino acid (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (11) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "Xaa is pyroglutamic acid"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

Xaa His Tyr Ser Leu Glu Trp Lys Pro Gly

- (2) INFORMATION FOR SEQ ID NO:34:
 - (1) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11 amino acids
 - (B) TYPE; amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
 - (11) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site

 - (B) LOCATION: 4
 (D) OTHER INFORMATION: /note= "Xaa is D-Phe"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 7
 - (D) OTHER INFORMATION: /note= "Xaa is D-Trp"
 - (x1) SEQUENCE DESCRIPTION: SEQ ID NO: 34:

Gly Cys Asp Xaa Cys Phe Xaa Lys Thr Cys Thr